

What is claimed is:

1. A tension member termination device for an elevator system comprising:
a socket having a bulbous end, said socket defining a tension member path therearound;
a load side plate affixable to said socket to apply a normal pressure to a
5 load side of an end of a tension member between said socket and said load side plate;
a cut side plate affixable to said socket to apply a normal pressure to a cut side of said end of said tension member between said socket and said cut side plate.
2. A tension member termination device for an elevator system as claimed in claim 1 wherein said path defined by said socket includes a surface which is textured to increase the coefficient of friction thereof.
3. A tension member termination device for an elevator system as claimed in claim 2 wherein said surface is sand blasted.
4. A tension member termination device for an elevator system as claimed in claim 1 wherein said load side plate and said cut side plates are affixed to said socket by a plurality of fasteners common to both plates.
5. A tension member termination device for an elevator system as claimed in claim 1 wherein said socket further includes studs extending from said socket in a direction to intersect said cut side plate enabling a greater compressive load to be placed upon said cut side plate than said load side plate.

6. An elevator system having an elevator car, a machine a counterweight and a flexible flat tension member extending between said counterweight and said elevator car, said tension member being terminated to at least one of said car and said counterweight by a termination device comprising:

5 a socket having a relatively narrow section and a relatively bulbous section, said socket defining a tension member pathway therearound and a fastener section for through passage of fasteners;

a load side plate fastenable to said socket by said fasteners, said load side plate extending along said relatively narrow section of said socket on a load side
10 thereof;

a cut side plate fastenable to said socket by said fasteners, said cut side plate extending along said relatively narrow section of said socket on a cut side thereof.

7. An elevator system having an elevator car, a machine a counterweight and a flexible flat tension member extending between said counterweight and said elevator car, said tension member being terminated to at least one of said car and said counterweight by a termination device as claimed in claim 6 wherein said
5 flexible flat tension member is located between said load side plate and said socket, extends around said bulbous section in contact therewith and between said cut side plate and said socket.

8. An elevator system having an elevator car, a machine a counterweight and a flexible flat tension member extending between said counterweight and said elevator car, said tension member being terminated to at least one of said car and said counterweight by a termination device as claimed in claim 6 wherein said
5 socket further includes studs extending from said relatively narrow section and toward said cut side plate to provide additional compressive capability to said cut side plate.

9. An elevator system having an elevator car, a machine a counterweight and a flexible flat tension member extending between said counterweight and said elevator car, said tension member being terminated to at least one of said car and said counterweight by a termination device as claimed in claim 8 wherein said
5 load side plate compresses said tension member to about 2 MPa.
10. An elevator system having an elevator car, a machine a counterweight and a flexible flat tension member extending between said counterweight and said elevator car, said tension member being terminated to at least one of said car and said counterweight by a termination device as claimed in claim 8 wherein said cut
5 side plate compresses said tension member to about 5 MPa.
11. An elevator system having an elevator car, a machine a counterweight and a flexible flat tension member extending between said counterweight and said elevator car, said tension member being terminated to at least one of said car and said counterweight by a termination device as claimed in claim 6 wherein said
5 socket and said load side plate and said cut side plate all include a textured surface corresponding to surfaces contacted by said tension member.
12. An elevator system having an elevator car, a machine a counterweight and a flexible flat tension member extending between said counterweight and said elevator car, said tension member being terminated to at least one of said car and said counterweight by a termination device as claimed in claim 11 wherein said
5 surfaces are sand blasted.
13. An elevator system having an elevator car, a machine a counterweight and a flexible flat tension member extending between said counterweight and said elevator car, said tension member being terminated to at least one of said car and said counterweight by a termination device as claimed in claim 6 wherein said
5 socket further includes a pivot pin receiver in said bulbous section.

14. An elevator system having an elevator car, a machine a counterweight and a flexible flat tension member extending between said counterweight and said elevator car, said tension member being terminated to at least one of said car and said counterweight by a termination device as claimed in claim 13 wherein said receiver is located in said bulbous section so as to be aligned with a load side of said tension member when engaged by said termination device.
15. A tension member termination device comprising:
a tension member compressor having at least one area that will contact a tension member having a traction enhanced surface thereon.
16. A tension member termination device comprising:
a compression member against which a tension member is compressible;
a load plane defined by said tension member in said compression member;
a pivot associated with said compression member, said pivot having a center which is aligned with said load plane.
17. A termination device for a tension member comprising:
a compressive system to engage and compress a tension member;
a biaser to maintain a selected compressive force on said tension member.
18. A spring loaded clamp for termination of a tension member comprising:
a clamp having at least two members;
a plurality of fasteners to fasten said members together in compressive relationship;
at least one biaser arranged to maintain said compressive relationship.

19. A method for terminating a tension member comprising:

feeding said tension member into a first side of a compressive system in one direction and looping said tension member back through a second side of said compressive system;

5 spring loading said compressive system;

compressing said compressive system around said tension member whereby said spring loading maintains a set compressive load on said tension member.

20. A method according to claim 19 wherein said compressing comprises compressing said first side of said compressive system to a first force and compressing said second side of said compressive system to a second force.

21. A method according to claim 20 wherein said second force is higher than said first force.